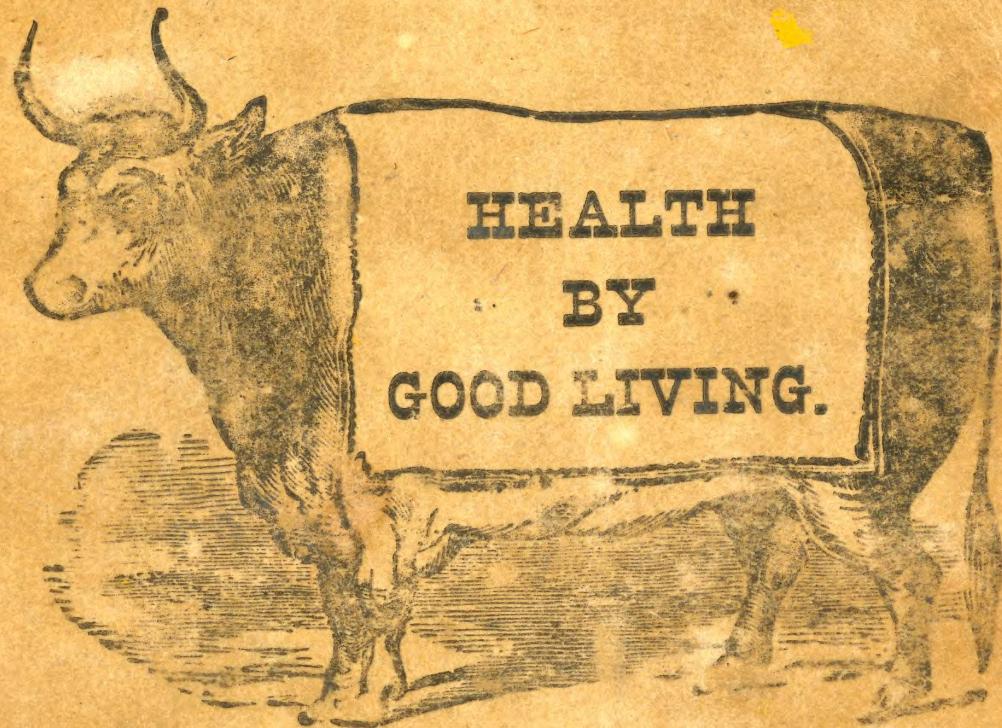


451.—473

ALWAYS BRING THIS BOOK.



HEALTH  
BY  
GOOD LIVING.

*Mr H. G. Dyer.*

IN ACCOUNT WITH

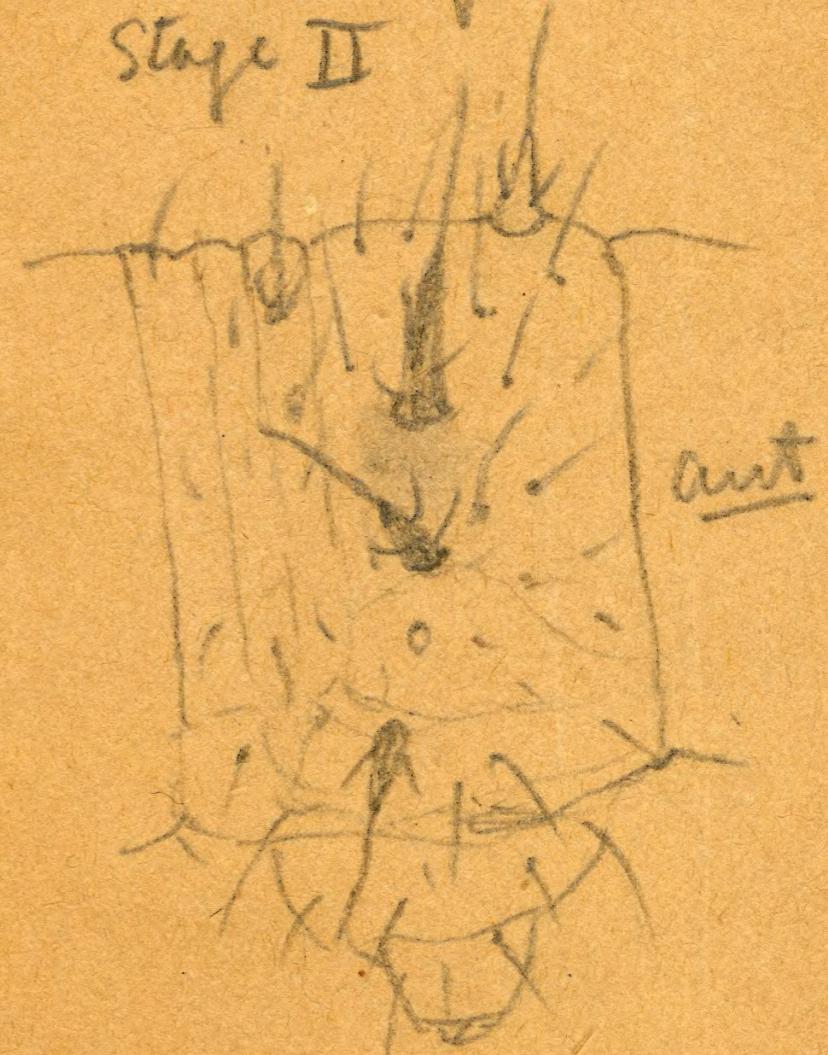
**J. L. BREMPER,**  
DEALER IN  
**CHOICE BEEF,**

Mutton, Lamb, Veal, Pork,  
HAMS, BACON, CORNED BEEF,  
**Tongues, &c.**

**POULTRY AND GAME**  
IN SEASON.



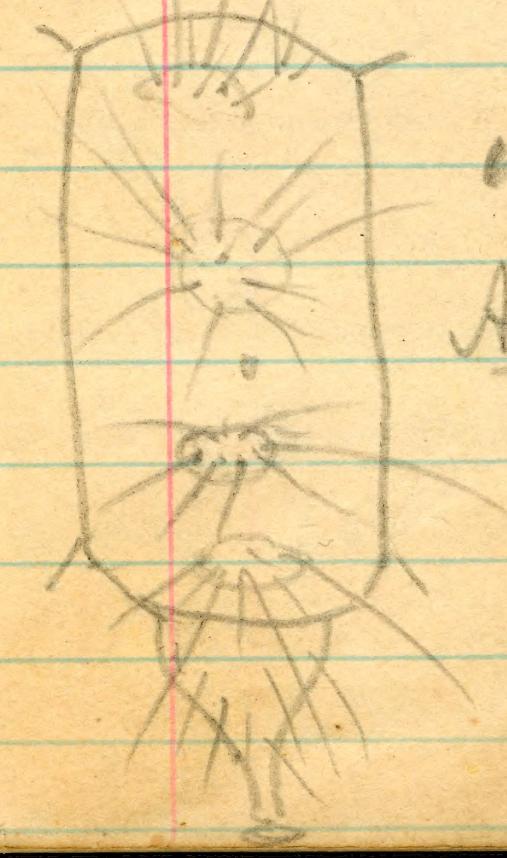
*Vanessa atalanta*  
Stage II



Stage III

July 3	3 <sup>1</sup> / <sub>2</sub> Duck 25	88
7	9 <sup>1</sup> / <sub>2</sub> Finch 25	231
11	2 <sup>1</sup> / <sub>2</sub> Chipping 25	63
	2 <sup>1</sup> / <sub>2</sub> Duck 25	56
14	8 <sup>1</sup> / <sub>2</sub> Buz 25	219
17	2 Duck 25	50
	1 <sup>1</sup> / <sub>2</sub> Quail 20	35
25	8 Larks 20	160
28	10 <sup>1</sup> / <sub>2</sub> Chipping 16	168
	4 Duck 25	100
		<hr/>
		11.70

Fri Aug 6. 90



J.P. Campbell

Aut

Glo.

Cephaelis defuncta St I

Keene Valley, N.Y.

June 24, 1894

(452)

Aug. 1	$\frac{1}{2}$ P. 65 P. 25	38
	$\frac{1}{2}$ P. Fleck 25	44
4	$\frac{1}{2}$ P. Dusk 25	188
6	$\frac{1}{2}$ P. Fleck 25	38
8	2 Fleck 25	50
	$\frac{1}{2}$ P. Ch. & 25	38
11	2 Fleck 25	50
12	2 Ch. & 25	50
15	5 Lamb 22	110
18	2 Ch. & 25	50
	$\frac{1}{2}$ P. Fleck 25	44
22	$\frac{1}{2}$ P. Dusk 25	56
25	$\frac{1}{2}$ P. Lamb 22	116
29	$\frac{1}{2}$ P. Dusk 25	63
		9.35

Ant. & segment of Schizaea unicornis (?) stage I on bagel, Keene Valley, N.Y.  
June 26, 1894  
(See BB 391)

Sept. 1	6 P. Lamb 22	138
5	$\frac{1}{2}$ P. Ch. & 25	38
8	$\frac{1}{2}$ P. Fleck & Ch. 25	69
	Ch. & 25	25
	2 Fleck 25	50
12	$\frac{1}{2}$ P. Lamb 22	126
19	6 P. Dusk 20	130
22	6 P. Lamb 22	143
26	$\frac{1}{2}$ P. Fleck 25	50
30	2 Out 20	40
15	$\frac{1}{2}$ P. Ch. & 25	31
29	$\frac{1}{2}$ P. Ch. & 25	69
	4 P. Dusk 25	60
		9.69

Ctenucha virginica  
hatched from

ant. yellow Spilidion.  
like eggs on a  
bush. Keene Valley,

May June 23, 1894  
BB 452

# Blue Book

451

Egg of *Hypenax aurva* in oak form.

In. J. Doll recd June 22, 1894. Nearly spherical but with flattened base slightly shiny, covered with narrow regular longitudinal wrinkles which become smaller at maturity, and faint, with minute dots at the junction (use higher power) d. 9 mm. Hatchet. June 23 Hd rounded, a little bulging at ocelli and under each lobe, pale brown shiny. w. bases of 1 enlarged, forming slight lumps in 5 and 12, setae long pale glandular with drop at tip. Body translucent yellowish feet all dark red from the anal ones elevated. Most of lateral area and the whole of 5, 8 and 12 red brown. Setae with large chitinous hornish bases, i on ant of it, fleshy enlargement, normal, i' post ss and, (vi absent), chitinous by plate

a tube like at vertex  
each lobe

partly naked but go on side to molt. Inf. June 26 Hd as in *ipomoeae* (BBS 398 II) the tarses broad, rather light brown, reducing the ground to rounded spots. Mucous as in *ipomoeae*, with fine dots tip, but all are limb bears a seta; ii scarcely enlarged, other normal. vi present, s-<sup>2</sup> v-<sup>1</sup> p-<sup>1</sup>, about 8 setae on ly plate, i on 5, 7 (9-10 small) and 12 black; m 3, 4, 6, 8 He 13 yellow, the color extending onto third seg. esp. 2 & last laterally on 11 & 13. The rest purple brown finely mottled with paler. Bases of the feet and foot on 7 dark; the feet and feet 8-10 & 13 very pale. Mucous if any pale except on 5 and 7. Setae brown glandular. Anal feet elevated towards end of stage the d. region becoming darker than the lateral giving band widening on 5, 7, 9-10 and 12. Sides of 2-4 dotted with bright white tips. Anal feet yellow.

the legs are often white tipped

Molt June 30 body slightly bloated by the mid-tubercles as before but rather small. Pale yellowish, the ventral band on angle of lobe most distinct the other enclosing little of low patches on median suture and giving the appearance of a coarse reticulation connecting the bands and repeated on sides of head; tarsus all red-brown finely mottled with yellow. W. 1.5± tubercles enlarged & produced, the tip furcate, one limb (usually the shorter one) bearing the long glandular setae & ii others enlarged, the rest normal. In 5 or 6 there are slight hummocks and in 9-11 this is less enlarged than others. Color purplish brown, finely mottled, sets of 3-4 pale and dorsal rhipid dorsal the darker shade incised by a series of bright yellow triangular patches including i and ii on joint 3, 4, 6, 8 (ranging in 9) 11 and 13

the w. on 11 also encloses the hind with yellow spots<sup>"out"</sup> and the whole varn is imperfectly bordered with yellow w. white, the border extending to anal feet feet and venter from tho. fed in lined with brown. tubercles almost white or whitish except in dorsal band setae dark, distinct, glandular,  
Molt July 13 Same at first (desc July 17)  
H. rounded, higher than wide but not above & not retracted, not bloated but sutures rather deep. W. 3 mm. Sides white with a yellow band reticulated with white bands of purple brown a band one rung over antenna & top of each lobe. Body pointed d. 5 or 12 tubercles; others red. large & conspicuous, elsewhere very small things; in 6-8 is white, and auto-dotted; all other tubercles mean spines, setae dark moderately long venter & legs purple brown dotted with white; sides whitish green to fine dotted with white & brown the and shading into a brighter large. Very very green, nearly yellow-green on side of 2-4, the enlarged tubercles I on 5- and 12 triped with red. a dark brown d. band, on 2-3; begin again on 5- and on 8 & 12, slightly incised in 6, 7 and 11 and tubercles; and ii them merged

with yellow spots,<sup>"out."</sup> and the whole body  
is imperfectly covered with yellow or  
white, the latter extending to small  
feet feet and ventral brown. Fins  
lined with brown. Umbrella almost  
white or whitish except in basal band  
setae dark, distinct, glandular.

Molt July 13 Same at first (desc July 17)  
It crowded, higher than late but not  
above 2 nor retracted, not lobed but  
setae rather deep. w. 3 mm band white  
with a yellow blot reticulated with white  
rows of purple from a band one rung  
from antenna to top of each lobe. Body  
pointed d. 5-12 tubercles; then red.  
large & conspicuous, elsewhere very  
small things; m. 6-8 to white, and  
other dots; all other tubercles mem-  
brane, setae dark moderately long  
venter & legs purple brown dotted  
with white; sides whitish green  
finif dotted with white & brown  
and shading into a bright

green on 24. On 2-3 a d. purple  
brown band, white dotted & bordered  
with yellow. On 5 a white 3d  
band marked with fine irregular  
purple brown lines begin at notch 1,  
loops up to 1 on 12 and runs to  
anal foot. The d. space then enclosed  
is bright dark yellowish brown green  
dotted with white with various  
white d. line markings. In 6 is  
marked by a little white patch and  
there is a 3 entanglement of 3d. lines on 8  
Anal feet pale outwardly, not used.  
slender, gently divergent  
[Back of one and one side of the others became  
wet giving a strong odor of HCl]  
Some do not lose all the d. down  
which remain in varying patches  
Tamed black ♂ July 22-24

the tips are often white tipped

most just below slightly blotted by the mid. tubercles as before but rather small. pale yellowish, the ventral bent at angle of lobe most distinct the other enclosing little yellow patches on midline gutters and giving the appearance of a cross reticulation connecting the bands and repeated on side of head; bands all red-brown fine, mottled with yellow. w. 1.5± tubercles enlarged & produced, the tip punctate on limb (usually the white one) bearing the long glandular setae, ii others enlarged, the rest normal. On 5 or there are slight bumps and on 9-11 the i is less enlarged than others. Color purplish brown, fine mottled. sets of 2-4 pale and dorsal rips darker the darker shade incised by a series of bright yellow triangular patches including i and ii on joints 3, 4, 6, 8 (running on 9) 11 and 13

the m on 11 also enclosing the spine feet pale, minor tipped, those on 8 & 9 a little pale than the others half elevated. Setae dark, glandular little later the sides of 2-4 become green. The green appears first in the yellow shade next the brown d. line and shades downward. It also appears at the sides of 11 and 12-13. Whole lateral region becomes paler brown setae very distinctly glandular ~~July 5~~ Same as before, setae still glandular but not very pronouncedly. Not all have the greenish shading July 8. Hd higher than wide, ophyphal, rounded suture not deep, pale yellow with vertical brown red brown bands in rear lobe mottled with pale, the space between and behind bands reticulated with red brown lines. w. mm setae from tubercles the 2 at apex & below on each lobe especially large. Roof leaf green, becoming yellowish green on sides of 2-4, the enlarged tubercles on 5 and 12 tipped with red. A dark brown d. band, on 2-3; begins again on 5 and on 10 & 12, slightly incised on 6, 8 and 11 and tubercles; and ii then mottled

[a *Crinia ruginosa* laid  
eggs just like those on  
June 24]

452

~~Eudromia~~ <sup>7</sup> Yaid in a patch ~~egg~~ fish separated  
~~Oreotrichia~~, egg on leaf which they  
would not eat, but ate grass.

Rounded conoidal, higher than  
hemispherical, base flat, diam. 8.  
height 7 mm color bright yellow  
surface finely but roughly reticulated  
rather evenly and not much  
smaller at the top. Scarce shiny  
Hd totus June 23 (see sketch for hatched  
cls. vi present!!) Hd shiny black,  
becoming pale below eyes. w. 4±  
body white, tubercles large black  
with single long hairs, black, as  
also all the feet.

MPT July 27 Narts many hained,  
the hair spinulose, long overhanging  
the extremities. Body pale, Hd  
and want black; a howl d and  
superstj. stripe. Hair dark  
a single very large transversal elongate  
want Hd on 3 and 4; it and v  
small, vi large, a lot of hair

with distinct tubercles on leg.

MPT July 1 Hd shiny black, body  
pale yellowish with howl broken  
d. and sv shading. Most  
blackish, howl long, rather  
fine. Black & white mixed, some  
long hairs overhanging the hairs.

MPT July 7 (Abd. 75+) Hd shiny black  
w 1±, body appears grayish black but  
is nearly considerably overlaid with  
pale surrounding the wants and in  
several transverse streaks. Hair thick  
yellowish centrally, black and white  
ringed at the extreme, long and  
overhanging some rather close  
short black hair arise from i on  
9 and 12

MPT July 14 Body black with Hd and  
lateral white line. Hair same but  
longer, pencils on 5 and 12 more  
distinct.

MPT July 23 same. Hd white line  
marred and broken.

midst by 4. Besides the long black  
pencils at 6 and 7 there is a row  
of short ones from 1 to 6-11 not  
longer than the other hair. Other  
hair 5-12 yellow, pale S-V. On  
2-7 and 13 many white, mixed  
with a few black ones. Next round  
is small, stiff, pale. Roof black, a  
dotted white band and whitish  
white band (crossing II and V). Hair  
black, feet rather pale. Hair barbed.

Woff Aug 18 Same as before the back  
feathers appear grey being  
brown and white about equal  
numbered (5) but 2.0 mm. 1.9

Mott Soft red shiny blocks, when pale  
red back with red moss white bands  
as before. Depth twice width all same  
length base 4-12 red a little  
longer than before. Base 1-11 except  
the last 5-6 yellow; all the  
rest gray (black & white mixed)

(sh. hd 2.25)  
the S-V barin not yellow as before  
shadow into various red on the front,  
spont. other lobes on sides and above  
WFL Sept 19 Hd 2.4+ Same, red on HD a  
little more extensive; front, red on S-V  
bar darker, larger black.  
XPL Oct 12 Hd 2.5+ as before except  
below brown front.

Sinervostra ocellatus sp. nov. Dr. Charlesworth, England. Exelliptical, flattened above and below (see sketch) Hatched zone 22 pale greenish brown red except at base. Under Hatched zone 22 pale greenish brown red except at base. In each conical granulation horn thickly covered with minute spicules and pointed tips (see sketch) and rounded below green with a yellowish line each stick to vertex scutella blade. Body brown yellowish green thickly dotted with black white in two annuli and forming a red line diagonal across vent. Dorsal and abdominal legs replaced by the 7 oblique lateral lines which always meet dorsally, form red, pilose. The last 2 pairs pale with reddish tips. Hd. 9 + brown line. Molt zones - Hd thick front & above tergite in 2 elongated tubercles from which a pale line runs down the angles, green covered with white granules well black with 2 +

body green, covered with white granules with pale red and oblique lateral line also granular, brown line red except at base. Under Hatched zone 22 pale greenish brown red except at base. In each conical granulation horn a transparent Y shaped seta but those on hd have no hot swollen sets. Molt zones 41 same ventral line pale yellow. Hd line confined to hairy the granulation on it and the oblique line longer than those elsewhere making these white lines also raised. Each conical white tubercle still bears a Y shaped seta but swollen and the bristles about them on the dorsal granulation are also Y shaped but not in the head. Molt ph 4 41 same line with 4 new granulations. Hd brown red, line same coloration, all green. Red line which is in the back lines wanting. Granulation

white in ante short simple set.

454

at apex. Some of the smaller ones egg-shaped on upper side of raspberry  
not larger than 1/2" across but few long hairs Valley N.Y. June 24 1879

Ground white, yellowish at times

flat at base, rounded above, root

July 13 all gammarus like

shiny, diam. 7, width 4 mm

setae, granulation rounded, bold

microvilli pitted, small with

irregular wrinkles, the red points

a high sharp pointed ridge

above it. Abdomen like white

surrounding it from which radiate

preceded by green shades, the one

10 rounded edges, regularly spaced

yellowish purple. The part

and joined to the body by

reddish, yellow at nose. Spots

cross ridge joining two vent. cells

abdomen with dark red borders.

with high ridges the posterior

a narrow yellow line as 1/3 broad.

ridge ridge for about 3 angles

and gently in form of a saddle,

and are then interrupted by occulta,

Horn long, concolorous, slightly

as in that there are 20 ribs in

curved backward. Hd 5 mm +

the side, each reticulated as

greenish. Dorsum more yellowish

described. Color white, a red

than 5 v.

blotch at apex and an orange

yellowed July 26

concentric band above the middle

the edge of both rather irregular

Hatched Jun 27 Rapidly losing

little dorsum's, what is left

colored, all white and for

and 3<sup>rd</sup> from center of al. canal green tubercle minute black,  
tubercles normal, in other part  
v. small (vi absent) 2 teeth on  
base of leg, black, slightly  
elevated with low distinct  
dent setae, taper pointed  
amount. Setae all present, but  
the 2 and pair abd v. are  
smaller than the others. Joint  
12 quite thick Hd pale brownish  
scutell 6, black; a few hairs.

Wf July 2 same normal black  
vi present, v. stiff, perfect  
canal single greenish white  
opaque, not shiny, 2 and pair  
abd per much smaller than  
the others. No marks except a  
single dusky spot tip. base  
foot abd not broken white  
(shd. w)

lim. Hd 5± broad with a great  
central hump so that it looks  
like head and 2 last pair much  
smaller near about. L.

green tubercle minute black,  
tubercles normal, in other part  
v. small (vi absent) 2 teeth on  
base of leg, black, slightly  
elevated with low distinct  
dent setae, taper pointed  
amount. Setae all present, but  
the 2 and pair abd v. are  
smaller than the others. Joint  
12 quite thick Hd pale brownish  
scutell 6, black; a few hairs.  
Ep. Hd 5± small (shd. 8)  
July 16 Hd green ep. black. abd 3+  
lips green, tubercles, d. 1d and 2d  
steg. thin brown, v. 2d broad  
ab. blackish shade, on 3d v. 2d  
lim. on upper side only 3d line indi-  
late. abd 1 Bp and 1 Pp 8 clear per  
2 and abd per still smaller than a little  
Wf July 2 same but Hd 18± parts  
ab. 2, greenish brown, abd  
white. abd 3, black, but soft and  
green, on lower side 1 white  
line irregular. Another small  
white shaded border on abd 3  
no anterior becoming yellow as oblique  
line between abd 2 and 3. abd 3  
slight gr. 2 and abd 3 very  
narrowed (ab 3 a little longer than abd 2)

754B Nine red rosettes on blackberry, eating  
flowers. Purple variegated. Hd with a  
downy tuft shiny leaves. Internodes white  
and distinct. 3d narrow pointed  
stems again distinct. White dots  
of tubercles small with a few  
fainter supplementary ones. No  
leaf blackish, abd, whitish pale  
<sup>(3rd 1.6)</sup>  
scarcely enlarged, but 13 mm. all told  
plus hd 23 mm. Same hd with black  
sheath before. The first black

454 ~~W~~ ~~H~~ ~~T~~ ~~B~~ (shd 1.9) new hd. 2.5 ± much  
the same at first

old	.50	.12	1.03	1.47	2.1	3.0
new				1.5		3.0

455

3 eggs laid separate on the very young  
shoot of Populus balsamifera, K. C. June 25  
Dust vine like apex. Transverse  
white, diameter 1 mm. Internode in  
single broad low ribs radiating  
from the minute crater base uncupped  
each soon divide into two and  
continue down the side, 28 mm. under  
connected by transverse lines much  
slighter than the ribs which have  
shallow hollow, elongated later  
narrow and becoming by the narrow  
ends with ribs. Smooth edges all  
rounded, slightly pluming.  
Hatched pink little hairy no-  
tions, etc, on the first black.  
Red sheath, by plate tubercles  
and back plate blackish, setae  
distinct, dark. Internodes normal  
from large nearly black areas  
(ribs) set all greenish about

it for 12 you a distinct appear

July 10 1900

456

Eggs laid by Euphantesa medica (not  
June 25-6 June 1900, N.Y., 1894)

- (1) alike. 12 enlarged dorsally  
angularly. Body pale green  
12 a little enlarged feet  
(2) and apparently all alike  
(3) with very large black  
mark from sides normal  
VI present. C-th. tan of ed  
and leg plate black, faint indications  
of whitish and gray lines. Hd  
black except a greenish patch at side  
<sup>(about 55)</sup>  
of each side and labrum. W. 9 mm  
molt just Head shiny green; w. 15 t  
body green, lateral black line with  
red white shade with a broken  
ad-d and lateral hair sparse  
black ringed. A broad white 3-3 line  
molt w. 13 H testaceous brownish with  
black spots. Lateral eyes connected  
into black spots & black L. w. 3 mm ±  
body whitish green with broad gray rusty  
orange band feet, lateral spots black  
and body with 3d + lat. whitish  
lines, small but 4 pale line faded in  
into black (desc. last year was campion)  
a red p. blotch but by back line  
blending down

suspended in a slender yellow  
fiber which runs from one egg to  
another so that the eggs always  
free in the air, elongated, flattened  
slight on two opposite sides but  
not so much as usual. Very  
shiny pale yellowish straw color  
like body of nymph:  $8 \times 6 \times 5$  mm  
Under the setae letters are repre-  
sented only by rather rough shallow  
dents, just indicated and not enough  
to give shadings. The whole surface  
is however finely but distinctly  
shaded off with flattened  
elevations all quite regular, rounded  
The suspending fiber merely adheres  
to the egg. = sticky secretion of mid gut?  
Eggs very delicate, smash easily  
when changes to pinkish yellow

July 13 Ad. 2mm - all w/ white wavy stripes  
Hab. low white pencils black on 5, 7, 12 &  
few blue hairs on 11 whole length vent  
long pencils blue

457

Hatched July 3 very long slender and  
loping with great rapidity when Acronycta lutea americana or poplar  
buckwheat seedlings cut up in sun (Granddettes) K.V June 26 1894  
irregular S shape ♂ and keep still when the rest is the same  
tree + wetish, lot fed on 10 and 13 blade Red, covered with long  
only segments annulate not w/ light yellow hair with 5 small  
very regular setae long pencils from 5, 7, 8, 9, 12  
short stiff glandular Palp & labrum white; a few short hair.  
ant. dark from black Red w/ white band, part of  
labrum. Head neck very small, concolor, but can  
be darker green, hair short brown  
covered silvery - vent and other sides very long fine  
white, rather translucent.

(Purp. all foot and head) voice

456 A with similar egg in abundance laid on  
short wool black on the rough back at base of a red  
cotton tree - pasture - near Hildene, Vt., June 30 1894  
also on old red willow edge of cotton and in horse hair on walls  
Hatched July 6. Red w/ white hairs more gray flowers  
and long pencils (no dots). Sp. and all died (gizz)  
not found in dish)

July 13 Ad. 2mm - all w/ white wavy stripes  
Hab. low white pencils black on 5, 7, 12 &  
few blue hairs on 11 whole length vent  
long pencils blue

Wash down June 29 1894 over 4 miles  
and went to bed from sun 4.0 mm  
Imago July 30, 1894 Cat. no. 11031

whitish not yellow-green like 443  
and of the streambed slope

458 = 227

In middle lava stage I in a little  
house in willows  
of a piece cut out  
of a leaf except  
the cut. A small lump  
and bottom brown  
with streaks of  
slight red dots  
black with white  
dots. Body pale

yellowish with faint green stripes; not  
white with stripes in stage, foot v, vi 3-v, a few other

dots as illustrated, vi absent,

in secondary ones (Gray 1894)

and lava stage about 5 minutes.  
mostly covered with brown scales

soon fall off like those of stage II  
all alike appearing obscurely green  
mesentically, even on old feet  
slender shaft. Hd calcareous, black.

459

Little Whirling leafy shrub  
growing on upland K. b. Gray 27 448  
just 3-6 large out of proportion  
7-13 small so that legs look  
short. 2 front pairs and first  
small, anal pair flat, slightly  
oblique. Ventral whitish  
with faint green stripes, crossed  
with white dots. Dots at  
an interval of white and fine  
yellowish normal for riverbed  
shrub, white with stripes in stage, foot v, vi 3-v, a few other  
dots as illustrated, vi absent,  
in secondary ones (Gray 1894)  
white among the dots and a  
few other supplementary dots  
without scales.

Walls set thick and flat, thickness 3-4  
small feet. Very green thickly covered  
with dots stuck rather haphazardly white dots  
at flat on base of leaf. Hd same  
as body but less green, anal dot &  
feet very pale. Spurts less rapid

(Shhd. 8)

460 = 257

~~Halicidota gracilata~~ on Prairie at

Keen Valley, N.Y. June 27, 1893. Stage I. Hd, i and ii in v 5, iii in II and iv in 12  
od, anal pl, the feet very black. Very white hair at  
and near black. Both ends. Looks strongly like next.  
and tubercle areas. Head + neck yellow like body except iii bluish  
ish. Body white (Me + Joffe) Exactly the same. Hd 1-  
Sister normal, except Hair over it larger and more abundant  
than iii near tips (see 257 for last three stages)

setae and its area. Molt July 13 Hd 2 - same but  
a confluent with ii with the black dorsal parts  
(vi absent). Molt head .5 mm. (Shhd. 4) all present (see BB 257)  
stage II most all with many hairs, Molt July 21 Both ends - still  
normal iii + iv, now, however, vi present black & d. Up to 4 in number.  
2-iv, large; many hair on leg plate + Molt July 28 (Shhd 2, 4) new hd 2. It  
Hd shiny black; w. 7.2 mm. 2 retracted Molt Aug 8  
cd small. Red, pale yellow, white  
black, hair scant, not concealing  
body though some long white ones  
overhang hd. Black & white mixed  
in black mouth from 5-12, i+ii

461

~~461~~ *Limulus hispifer* on  
*Populus tremuloides*, K.V.

ant. July 28, 1898; in peach

Stage I. Setae minute

with sharp tips, no

secondary setae. I and,

below ii post; 3 supra-ste. post; iv and v

3-8, nearly on line, is a single highest, of 2 retic., 1 below & the other just (vi absent) a single spine on base of leg + index, separated and the viii [unjustified, made vs. curr. status which is non-medio-ventral line

of the segments. I and ii alternate + on 12 (fig) vi is plainly seen to be absent (but which is lower not determined) as vii. This occurs normally on the by

Stage II. Roughly tubercular, iii, iv and v+vi. Lateral wrinkles; legs as in mature

apparently represented by small tubercles - Egg elliptical, flattened on a little

warty shell which seems to repeat with concave on two sides, nearly being i is smaller, with and above ii, many warty, reticulate. Size .7 x .5 x .3 mm secondary tubercles, not especially

in a transverse row near first edge of segment. Slight sd line on 3 and 4 +

apparently represent secondary a sd line, slight one on 12 represent ii.

462

~~462~~ newly hatched  
scutellid on

ant. *Vitis vulpina* L.

Kane Valley, Mo.,

June 28, 1898.

Setae normal, (vi

absent) vii consist

3-8, nearly on line, is a single highest, of 2 retic., 1 below & the other just

(vi absent) a single spine on base of leg + index, separated and the viii

[unjustified, made vs. curr. status which is non-medio-ventral line

of the segments. I and ii alternate + on 12 (fig) vi is plainly seen to be absent

(but which is lower not determined) as vii. This occurs normally on the by

Stage II. Roughly tubercular, iii, iv and v+vi. Lateral wrinkles; legs as in mature

apparently represented by small tubercles - Egg elliptical, flattened on a little

warty shell which seems to repeat with concave on two sides, nearly being i is smaller, with and above ii, many warty, reticulate. Size .7 x .5 x .3 mm

secondary tubercles, not especially

in a transverse row near first edge of

segment. Slight sd line on 3 and 4 +

apparently represent secondary a sd line, slight one on 12 represent ii.

bottom in alder July 12

463 = 414

Litter from 1/2 m. W. White Birch, July 12, 1914, Green Valley, Mo.

Cottontail whitish foot shiny green

Hair brown spots, long silvery

white mixed with a few black & small, has very fine black

ms from 1 m. 3, 5, 7 and 12. Hd secondary hair shorter and finer than

black, whitish, eye black, mouth

hair, w. 5 + mm (7)

July 2 Hd shiny black with a

concentrated close to skin and 2nd dark shading to fleshy white

connected above it by a cross bar. 3 in the neck, 4 in the head, 5 in

a white mouth and with a cleft. Be distinguished from the 2<sup>nd</sup> hair (12)

greenish centrally, mouth purple. Mid July 12 Same, but black not

hair so curved, 2 aps. white with black in incisives. 2<sup>nd</sup> hair separated

by distinct black pencil from black fur above. 1<sup>st</sup> hair still pale

5, 7 and 12 m. 1. most conspicuous radiating fine count. Hd 2.5 +

1. whitish, slight variation. The upper surface of hands & hair is

black and marking (1.2)

July 7 Head entirely black

Conspicuous at top the white on

an specimen of 183414 (9.v) except ventral black as well as the feet.

July 4 1914 1 m. off like 476 A but all  
white. Sooty mostly dark, a set on leg  
one sp. Hd like 574. Hd .6 ± 100 like 574  
~~and just 114~~ Pale underneath, white w. Hd  
in color of body which is only

partly black being spotted and  
crossed with yellow esp. on tip.

Next 2 m. = Mirror tail from dis-

tinguishable parts, is sp. just rare

white mixed with a few black & small, has very fine black

ms from 1 m. 3, 5, 7 and 12. Hd secondary hair shorter and finer than

black, whitish, eye black, mouth

hair, w. 5 + mm (7)

most numerous dorsally. Phe-

asant July 2 Hd shiny black with a

concentrated close to skin and 2nd dark shading to fleshy white

connected above it by a cross bar. 3 in the neck, 4 in the head, 5 in

a white mouth and with a cleft. Be distinguished from the 2<sup>nd</sup> hair (12)

greenish centrally, mouth purple. Mid July 12 Same, but black not

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5, 7 and 12 m. 1. most conspicuous radiating fine count. Hd 2.5 +

1. whitish, slight variation. The upper surface of hands & hair is

black and marking (1.2)

July 7 Head entirely black

Conspicuous at top the white on

an specimen of 183414 (9.v) except ventral black as well as the feet.

July 17 Lake native larva

width of head 3 mm + posterior limb  
all yellowish brown except S-V

where yellowish. Body all black,  
except in folds where the hair is very

thick and then again yellow. No

cautious yellow ss band. Evidence

that's the N. J. See BB 77

(like a variet of 414) a narrow  
faint line of yellow hair (3.6)

July 24 See 414. The pencils are

relatively thinner and shorter than the substratum an extra long

before. W. hd. 5 mm + Post body all

black. Second. hair scattered down

to near spiracles. S-V pale yellowish

went down Aug 5

Imags June 23 1895 A. dactylina

Cat. no. 11579

=dactylina by the author. Ed.

464

Pupilio thorax, hatched from eggs  
on hop and ash  
Keene Valley, N.Y.

June 29, 1894

Ant. pubescence converted  
into warts, ii and  
iii with pointed  
bases, each with  
several glandular

setae. iv and v in

one above them, but the t. absent

black. Second. hair scattered down

on joints 12. vi present two setae

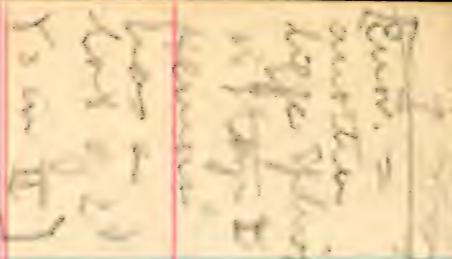
and a third short, w 3 and one

1 first. Many setae on leg.

(Bella 4)

H. thysbe

$$17 \times 23 = 465$$



Female measured

abdomen hatched.

One egg on

ant larva

leaves at

Keene Valley

N.Y. June 30

1914. Tip of tip. iv. v in line, conical, white with greenish tint; a slight fold, distinct, the tip centrally, brown black, p. faint, granular (v above) tubercles normal large on outside of tip and on a part, greatest setae, vi not granular. iv is which shorts absent. On 12 it is thin & more indistinct, the brown on the brown - even from above it can with 13<sup>rd</sup> which has no other difficulty from the lateral aspect, primary tubercles though I finally positioned now it. it; ii behind, the rest occurring normal and difficult to separate from those present on 13 ant, especially in 5-6 region.

Egg white, thick, tan, smooth, no markings.

$$466$$

Rein capsule in cage

from the hotel garden

ant

Keene Valley, N.Y.

Hatched July 1 1914

i, ii, iii with similar

tares, setae long,

slender with globules

467

Hyalinotrichus caninus on willow

Keweenaw Mts., Mich.

Hatched July 2 1894

Setae simple, not  
pointed at ends and  
barbed, if below  
the spiracles and  
a little posterior.  
vi present anterior

small, all normal. Head pale,

tribechia, setae, ogh and mol.

plate are black, back yellowish.

468

Spilomena varivitta

five eggs or nymphs  
hatching on willow

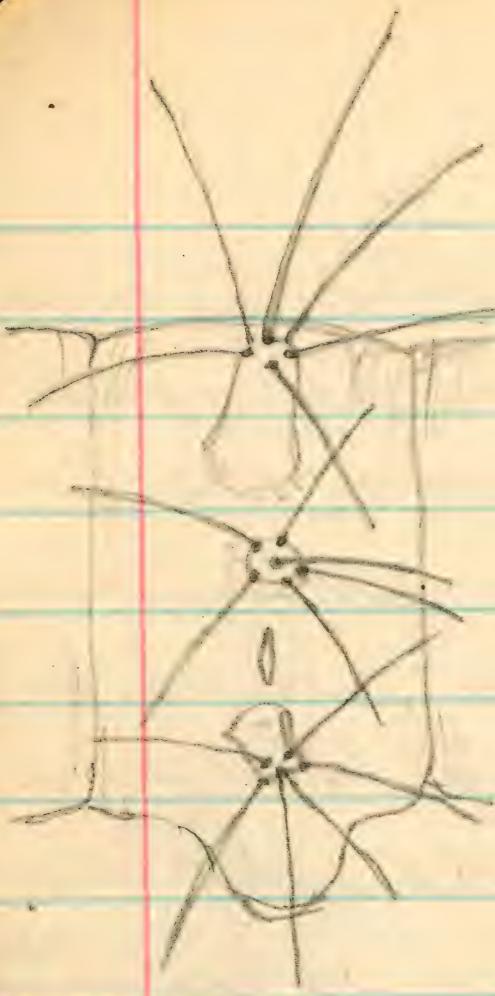
ad. near hatched  
July 3 1894 Keweenaw  
valley Mts.

Tribechia large,  
blackish, setae  
pointed barbed  
if and in place,

i, IV and V white (vi absent.)

Head and leg plates scarcely colored

+ Body brownish yellowish, no marks.



469

Teloa polyphemus  
on white rock at  
Keene Valley, N.Y.;  
hatched July 3, 1894  
about 12 sharp distinct longitudinal  
ridges present and ridges like Rivetidae, crossed by  
apparently the full a great number of fine transverse  
structure of the spine not reticulated into cells  
maturing larva (I and scarcely flexing the apical set-  
which take note). No unpaired dorsal; line of the ridges at all. Scarcely  
i-i in 12 closer than in other segments white, faintly greenish. 5 x .3 mm  
then bases united, but not opp remote. ~~hatched July 17~~ i, ii, iii normal, ii  
in 13, a pair on anal plate (13 post)  
Only 3 rows anywhere except 3 and 4  
when there are 4 (2-5-8); in 13 only  
two and on 13 post only, the one.  
gravel July 31 Three total, 4 on 3 & 4

it in - 2 on 13 and one  
slight <sup>pair</sup> on anal plate, a  
number of hair especially  
but dusky and S-V. On 3 in  
2 on 8 & lacking. In fact, *Crambus mutabilis*  
coral red (R.C.), 10 days.

470

<sup>young larva</sup>

Egg of gray Crambus laid July 3, 1894, Keene  
Valley, N.Y. Shape not round, a little  
truncate at the two small ends with  
about 12 sharp distinct longitudinal  
ridges like Rivetidae, crossed by  
a great number of fine transverse  
striae not reticulated into cells  
maturing larva (I and scarcely flexing the apical set-  
which take note). No unpaired dorsal; line of the ridges at all. Scarcely  
i-i in 12 closer than in other segments white, faintly greenish. 5 x .3 mm  
then bases united, but not opp remote. ~~hatched July 17~~ i, ii, iii normal, ii  
in 13, a pair on anal plate (13 post)  
Only 3 rows anywhere except 3 and 4  
when there are 4 (2-5-8); in 13 only  
two and on 13 post only, the one.  
gravel July 31 Three total, 4 on 3 & 4

it in - 2 on 13 and one  
slight <sup>pair</sup> on anal plate, a  
number of hair especially  
but dusky and S-V. On 3 in  
2 on 8 & lacking. In fact, *Crambus mutabilis*  
coral red (R.C.), 10 days.

## Lophocarta angica

12  
1814

47

Eff. singly or upon sides near midrib  
large leaf white brich, K.V. July 1894  
rounded ~~widely~~ base, ~~anterior~~  
flattened  $\frac{2}{3}$  terminal. Stem brown  
bright green, slightly shiny like a  
~~blue~~ sky blue. — greenish. Recepta-  
tion and ~~and~~ rounded, scarcely  
angular becoming small and indistinct  
at apical region. In the side  
the reticulation edge of the cells become  
wood, flat almost  $\frac{1}{2}$  in. wide,  
radiating the depression to shallow pits  
lens-shaped and dots upper side of  
leaf a little red esp. the <sup>margin</sup> midrib at  
the apex of leaf in stage II ~~it~~ bears a  
long perch of the ~~leaf~~ <sup>margin</sup> midrib  
and eat the whole leaf tree nerve.

Top 11rd striped velvoted greenish  
a smoky black shade close to  
the bottom of the area a narrow  
smoky band runs the upper edge  
of the lateral angle

~~all .59 .95 1.54 2.48 4.0 (n. 64)~~  
~~.6 1.0 1.6 2.5 ± 4 ±~~

~~a few setae W. 1 mm ± Body color~~  
~~smooth, felt normal as usual. The~~  
~~felt & plate black except anal~~  
~~setae also dark~~  
~~and fine.~~  
~~Setal pads very inconspicuous~~  
~~normal. vi p. 200. Body, 6 mm~~

Egg on white brick Jan 22 1895. Fresh  
white, some yellow, a little more peachish  
at apex. Retinacula many and re-  
ctangular, hexagonal but faint and thin,  
all defined 1 mm. height. Shape very  
nearly spherical, a little irregular tucked  
under at base.

Hatched July 1. just like 471 g.v.  
July 12 by stage II like 471 II

Spots black lateral line (this far back except at joint) very obscure and dusky, 5d, but no stigmata, wavy lateral lines. All black and green the deeper part.

Egg on white brick Jotust June 22 1895. Fresh  
white, smooth shiny, a little more greenish  
at apex. Retinacula narrow rather rep-  
etuous, hexagonal but pointed and low,  
all distined 1 mm. high at top. Shape very  
nearly  $\frac{2}{3}$  spherical, a little too much tucked  
under at base.

Hatched July 1. just like 471 g.v.  
July 12 In stage II Like 471 II



Dyar  
3 West 99th St.  
Island City  
N.Y.

Loph. h. peruviana

Oct 12  
1874

	Coll.	.59	.95	1.54	2.48	4.0 (n. 64)
mass.	.6	1.0	1.6	2.5±	4±	

471

Eff. singly or upper side near middle of top leaf of white brick, K.V. July 1874. Rowed with base downward flattened & elongated. L. 1 mm.  
height 6 mm., slight slope from blue greenish. Return lateral next the curved stem very irregular breaking around and indented at middle region. In the sides the reticulating edge of the cells brown moist, flat almost like mud - not so deep as to shallow pits form in the and eat upper side of leaf a little rag off the midrib at the apex of leaf in stage II <sup>make</sup> breaks a long reach of the edge of midrib and eat the whole leaf like nerve, right off right lobed green a smoky black shade over the whole and a narrow smoky band runs along the lateral angle

a few setae w. 1 mm ± Body color smooth, feet normal, and the fast a by plate, blade except and dark setae all and fine, very blunt, almost like very inconspicuous normal, vi normal. Body green with very faint elevated red spots lat. and supra. Stomach white lines spiracles pale, not glandular mouth slightly browned, flat before and held not flat. Leaf green & a smoky black band runs behind ocelli back and up, tapering and end at side of head; mouth reddish red body as before but the fine glands setae have in intersc. Color legs green. On 2-3 a yellowish line along alone with red among pure blue spiracles to lateral line. The first black except at joint very faintly reddened, st. lot. and at mouth wavy whitish lines. All with red green the claspers faint

Eats leaf from base on both sides  
no eth. in anal fil.

smoky Sprinkle reddish centered  
yellow grey. Body 1.6 cm.  
width side 0.15 cm. Total width  
that of a 1 mm. seta. Body  
grey brown composed of oblique  
irregular yellowish dashes. No  
additional transverse red  
bands. White dorsal line  
with pale reddish, w. 2.5 mm. Red smooth  
red medially in joint 13.

[Right] body yellowish with a vertical white d. band  
sharply black, w. 5 mm. Body  
yellowish grey; other bright, throat shaved so thin; a row of white dot  
post black, the double transverse (or lateral line); a few yellow dot  
setae fine, about black, lateral  
but without distinct transverse  
feet all used. Setae small, pointed with smoky. Sprinkle light red  
and, it is nearly in line, no anal dash. Feet grey, the thoracic ones  
grey, in 8 post, 1 ant (in absent) mounted with black at the joints  
three or more on legs. Leg plates one. Sprinkle a 2 white with black trans-  
colours with body. No anal plate. No. 10 oblique line <sup>2-3</sup> yellow below  
body is yellow with a green shade  
faintly repeated in joint 4 as  
anything. Spots about 3 mm. 7 max. a 9 setae in leg plate

~~The pupa of Hh 4m & head out flat  
rounded broad and flattened before  
light green, a white thin each side &  
an another from palpi canque shgs  
to vertex of each lobe, a band behind  
ocelli runs back to end of 3rd segment  
out, curving up post, snouty purple  
and fading to yellowish on it lower side. Lame flattened, evenly rounded  
body soft yellowish leaf green, tipings  
post, full plump, cylindrical. A  
broad yellowish white add. line, the  
space between filled in with reddish  
in 13, faint lines for broken sd, and  
2 or 3 round yellow dots here and  
there faint white  
shaded, again clear soft green  
the feet reddish, black at tip. Abd.  
concolorous with body. Setae extremely  
minute except on legs. Claspers  
dull brownish. Length about 30 mm~~

Imago Aug 15 1894 Cat no 11040

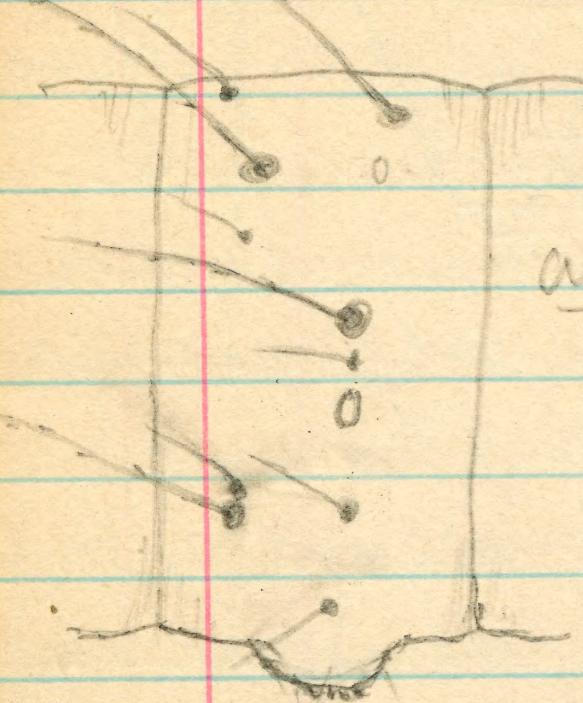
Lophodonta ferruginea ♂

472

Egg and larva of Tenesica tenuivittata  
eating wolly lice on alder July 4<sup>th</sup>  
Keen Valley, N.Y. Mature Larva  
like Quisces but retraced, segments  
deep and strong, so ridge prominent,  
and, fading to yellowish on its lower side. Lame flattened, evenly rounded  
body soft yellowish leaf green, tipings  
body but indistinct, but especially  
broad yellowish white add. line, the  
space between filled in with reddish  
the form of which are gathered  
together into rather distinct warts  
Hair blunt white, darkened, not  
obscuring the body at all. Color - a  
whitish grey with a broad white  
sd line, and tubercles ① pale  
orange bordered below with blackish  
D. spin whitish with dark narrow  
bordered line, a faint white shg.  
line. Down from lice adheres to it  
warts appear to represent roughly  
i, ii, iii and iv & v.  
Giant larva all grayish (see alcohol)

egg laid singly under the tree in

the bark. white (see shell in alcohol)



Hatched July 12 1898

white. fd. tho.  
ant feet, c-th, anal  
plate and  
tubercles black  
setae brownish  
barbed, the  
primary ones

long; secondary much shorter  
with smaller tubercles. A  
curved little pore resembling a  
spine situated sd. below  
tubercle i.

473

Two eggs on back of <sup>white</sup> brick, pale green  
slimy <sup>more than</sup> hemispherical with a slight  
elevated ring around mucopyle,  
base flat; w. 1 mm, height .65 mm  
Reticulation flat and narrow the  
cells rather large, becoming small  
at mucopyle the very whitish  
(vacuolated?) [use higher power] Aug 4 1898  
(died)

